


**MECHANICAL SYSTEMS DATA SHEET: COLUMN**

PLANT ITEM No.

24590-PTF-MV-CNP-DISTC-00001

Project	<b>RPP-WTP</b>	P&ID	<b>24590-PTF-M6-CNP-P0010</b>	 R10377791
Project No	<b>24590</b>	Process Data Sheet	<b>24590-PTF-M5D-CNP-00001</b>	
Project Site	<b>Hanford</b>	Vessel Drawing		
Description	<b>Cesium Evaporator Nitric Acid Rectifier CNP-DISTC-00001</b>			

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RPP-WTP-PDC**Reference Data**

Charge Vessels (Tag Numbers)	<b>None</b>
Pulsejet Mixers / Agitators (Tag Numbers)	<b>None</b>
RFDs/Pumps (Tag Numbers)	<b>None</b>

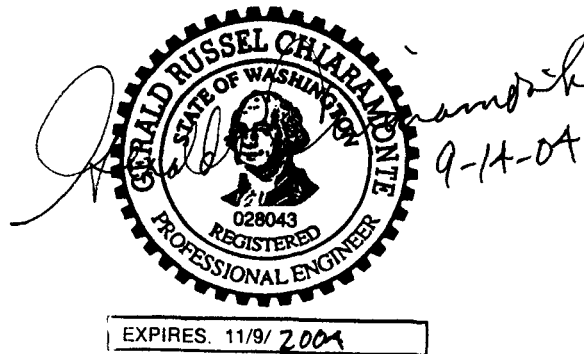
**Design Data**

Quality Level	<b>QL-1</b>	Fabrication Specs	<b>24590-WTP-3PS-MV00-TP001</b>		
Seismic Category	<b>SC-I</b>	Design Code	<b>ASME VIII Div 1</b>		
Service/Contents	<b>Nitric Acid</b>	Code Stamp	<b>Yes</b>		
Design Specific Gravity	<b>*</b>	NB Registration	<b>Yes</b>		
Maximum Operating Volume	gal	<b>*</b>	Weights (lbs)	<b>Empty</b>	<b>Operating</b>
Total Volume	gal	<b>*</b>	Estimated *		
			Actual *		

Inside Diameter	inch	<b>36*</b>			Wind Design	<b>Not Required</b>	
Length/Height (TL-TL)	inch	<b>144*</b>			Snow Design	<b>Not Required</b>	
		Vessel Operating	Vessel Design	Coil/Jacket Design	Seismic Design	<b>24590-WTP-3PS-SS90-T0001 &amp; 24590-WTP-3PS-MV00-TP002</b>	
Internal Pressure	psig	<b>-13.25*</b>	<b>50*</b>	<b>N/A</b>	Seismic Base Moment *	ft*lb	
External Pressure	psig	<b>0*</b>	<b>15*</b>	<b>N/A</b>	Postweld Heat Treat	<b>Not Required</b>	
Temperature (min/max)	°F	<b>130/140*</b>	<b>40/250*</b>	<b>N/A</b>	Corrosion Allowance	Inch	<b>0.04</b>
Min Design Metal Temp.	°F	<b>40</b>			Hydrostatic Test Pressure *	psig	

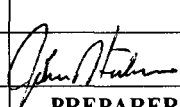
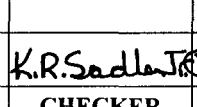


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EXPIRES. 11/9/ 2004

This bound document contains a total of 2 sheets

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### Materials of Construction

Component	Material	Minimum Thickness / Size	Containment
Top Head	<b>SB688 UNS N08367/N08926 (6% Mo)**</b>	*	<b>Auxiliary</b>
Shell	<b>SB688 UNS N08367/N08926 (6% Mo)**</b>	*	<b>Primary</b>
Bottom Head	<b>SB688 UNS N08367/N08926 (6% Mo)**</b>	*	<b>Primary</b>
Support	<b>SA240 304 (Note 3)**</b>	*	<b>NIA</b>
Jacket/Coils/Half-Pipe Jacket	<b>NIA</b>	<b>NIA</b>	<b>NIA</b>
Internals	<b>SB688 UNS N08367/N08926 (6% Mo)**</b>	*	<b>Sieve Trays</b>
Pipe	<b>SB690 UNS N08367/N08926 (6% Mo)(Seamless)**</b>	*	<b>See Note 4</b>
Forgings/ Bar stock	<b>SB462 UNS N08367/N08926 (6% Mo)**</b>	*	<b>As Note 4 for Nozzle Necks</b>
Gaskets	*	*	<b>Auxiliary</b>
Bolting	<b>SA194 8M/SA193 B8M</b>	*	<b>Auxiliary</b>

### Miscellaneous Data

Orientation	<b>Vertical</b>	Support Type	*
Insulation Function	<b>NIA</b>	Insulation Material	<b>NIA</b>
Insulation Thickness (inch)	<b>NIA</b>	Internal Finish	<b>* (Note 1)</b>
		External Finish	*

### Remarks

\* To be determined by Seller.

\*\* To be verified by seller.

**Note 1: Weld surface finish shall be de-scaled as laid.****Note 2: Design life is 40 years.****Note 3: Maximum carbon content of 0.030% for all welded components****Note 4: Nozzle necks below maximum liquid level are primary, others auxiliary.**